

WHAT IS CLAIMED IS:

1 1. A intervertebral support system, comprising:
2 a center portion having top and bottom recesses;
3 a top portion having a bottom recess, the bottom recess in the top portion
4 interlocking with the top recess in the center portion when the top position is positioned
5 on top of the center portion; and
6 a bottom portion having a top recess, the top recess in the bottom position
7 interlocking with the bottom recess in the center portion when the center portion is
8 positioned on top of the bottom portion.

1 2. The intervertebral support system of claim 1, wherein the top and
2 bottom recesses in the center portion are generally centrally located mid-way along the
3 length of the center portion.

1 3. The intervertebral support system of claim 1, wherein the bottom
2 recess in the top portion and the top recess in the bottom portion are generally centrally
3 located mid-way along the length of the respective top and bottom portions.

1 4. The intervertebral support system of claim 1, wherein one end of
2 the center portion is tapered downwardly from a top surface and upwardly from a bottom
3 surface.

1 5. The intervertebral support system of claim 1, wherein each of the
2 top, center and bottom portions have side grooves extending along opposite sides thereof,
3 the side grooves each being adapted to receive a prong of a positioning tool therein.

1 6. The intervertebral support system of claim 1,
2 wherein the center portion has a generally flat top surface and a
3 generally flat bottom surface, and
4 wherein the top portion has a generally flat top surface, and
5 wherein the bottom portion has a generally flat bottom surface;
6 wherein the top surfaces in the center portion and the top portion are
7 generally co-planar when the top portion is positioned on top of the center portion, and
8 wherein the bottom surfaces of the center portion and bottom portion are
9 generally co-planar when the bottom portion is positioned under the center portion.

1 7. The intervertebral support system of claim 6, wherein each of the
2 top and bottom surfaces have a plurality of small grooves formed therein, the grooves
3 increasing sliding friction across the top and bottom surfaces.

1 8. The intervertebral support system of claim 1, wherein the top and
2 bottom portions are positioned parallel to one another and perpendicular to the center
3 portion when the top portion is positioned on top of the center portion and the bottom
4 portion is positioned under the center portion.

1 9. The intervertebral support system of claim 1, wherein each of the
2 top and bottom portions have a tapered end, and wherein the top and bottom recesses in
3 the center portion each comprise ramp portions which are dimensioned to engage the
4 respective tapered ends of the top and bottom portions such that the center and top
5 portions can be respectively slid over the bottom and center portions with the recesses in
6 the top and bottom portions interlocking with the respective recesses in the center portion.

1 10. The intervertebral support system of claim 9, wherein the tapered
2 ends of each of the top and bottom portions assist in advancing the top or bottom portion
3 into a snap-fit position over the top and under the bottom recesses in the center portions.

1 11. The intervertebral support system of claim 1, wherein the top and
2 bottom portions are held against the center portion such that the recesses in the top and
3 bottom portions interlock with the recesses in the center portion by pressure exerted
4 between adjacent vertebrae.

1 12. The intervertebral support system of claim 1, wherein each of the
2 top, center and bottom portions of the support assembly are dimensioned to be received
3 through 8 mm surgical cannulae.

1 13. The intervertebral support system of claim 1, wherein each of the
2 top, center and bottom portions of the support assembly are dimensioned to be received
3 through 6 mm surgical cannulae.

1 14. The intervertebral support system of claim 1, wherein the top and
2 bottom portions are interchangeable.

- 1 15. The intervertebral support system of claim 1, wherein the top,
2 center and bottom portions are made from bone allograft.
- 1 16. The intervertebral support system of claim 1, wherein the top,
2 center and bottom portions are made from metal.
- 1 17. A method of supporting adjacent vertebrae, by assembling an
2 intervertebral support assembly between adjacent vertebrae, comprising:
3 advancing a bottom portion having a top recess into a patient's
4 intervertebral space;
5 advancing a center portion having top and bottom recesses into the
6 patient's intervertebral space; and
7 advancing a top portion into the patient's intervertebral space;
8 wherein the top portion has a bottom recess which interlocks with
9 the top recess in the center portion, and the bottom portion has a top recess which
10 interlocks with the bottom recess in the center portion such that a top surface of the top
11 portion is generally coplanar with the top surface of the center portion, and such that a
12 bottom surface of the bottom portion is generally coplanar with the bottom surface of the
13 center portion.
- 1 18. The method of claim 17, wherein the bottom portion and the top
2 portion are advanced in a first posterolateral approach and the center portion is advanced
3 in a second posterolateral approach, wherein the first posterolateral approach is generally
4 perpendicular to the second posterolateral approach.
- 1 19. The method of claim 17, wherein the intervertebral support
2 assembly has an X-shape.
- 1 20. The method of claim 17, wherein each of the top, center and
2 bottom portions are advanced into the patient's intervertebral space through minimally
3 invasive surgical procedures.
- 1 21. The method of claim 20, wherein the surgical cannulae have an
2 interior diameter not exceeding 8 mm.
- 1 22. The method of claim 20, wherein the surgical cannulae have an
2 interior diameter not exceeding 6 mm.

1 23. The method of claim 17, wherein each of the top, center and
2 bottom portions are individually supported by a surgical tool having two prongs, and
3 wherein each of the top, center and bottom portions has side grooves dimensioned to
4 receive one of the two prongs therein.

1 24. The method of claim 17, wherein positioning each of the top,
2 center and bottom portions in the patient's intervertebral space assists in prying apart
3 adjacent vertebrae.

1 25. The method of claim 17, wherein positioning any of the top, center
2 and bottom portions comprises:
3 advancing a tapered end of the portion over a ramp surface on an
4 adjacent portion, the ramp surface on the adjacent portion being disposed within a recess
5 on the adjacent portion, wherein a corresponding recess on the portion interlocks with the
6 recess on the adjacent portion.

1 26. An intervertebral support system, comprising:
2 a bottom portion having a top recess; and
3 a top portion having a bottom recess, wherein the top and bottom recesses
4 interlock together when the top portion is positioned on top of the bottom portion.

1 27. A method of supporting adjacent vertebrae by assembling an
2 intervertebral support assembly between adjacent vertebrae, comprising:
3 advancing a bottom portion having a top recess into a patient's intervertebral
4 space; and
5 advancing a top portion having a bottom recess into a patient's intervertebral
6 space,
7 wherein the top recess on the bottom portion interlocks with the bottom recess
8 on the top portion such that a top surface on the bottom portion is generally coplanar with a
9 top surface top portion, and such that a bottom surface on the bottom portion is generally
10 coplanar with a bottom portion on the top portion.